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| 10/686,726      | 10/17/2003  | Patrick Brouhon      | 200207057-2         | 8281             |

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HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

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| EXAMINER |
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RODRIGUEZ, LENNIN R

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| ART UNIT | PAPER NUMBER |
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2625

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ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM  
mkraft@hp.com  
ipa.mail@hp.com

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|------------------------------|--|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/686,726   | <b>Applicant(s)</b><br>BROUHON, PATRICK |  |
|                              | <b>Examiner</b><br>LENNIN R. RODRIGUEZ | <b>Art Unit</b><br>2625                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed on 12/14/2007 have been fully considered but they are not persuasive. Applicant's argument that "Desormeaux's printing apparatus 60 does not correspond to a computer mouse in shape or size or function" has been fully considered, in response "Desormeaux '124 discloses all the subject matter as described above except wherein the hybrid printing device has a computer mouse form-factor.

However, Yamada '872 teaches wherein the hybrid printing device has a computer mouse form-factor (Fig. 2 and column 3, lines 45-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made wherein the hybrid printing device has a computer mouse form-factor as taught by Yamada '872 in the system of Desormeaux '124. A solution to the minimum size requirement of a conventional stand-alone printer and the limited types of print media that can be used to print an image is a hand-held printer that can be manually manipulated over a print medium (column 1, lines 44-48)".

Applicant's argument regarding "While column 7, lines 18-23 of Desormeaux describes that a strip of tape carrying regularly spaced markings or other indicia may be placed on the print surface to lie under the sensor 120 during the print stroke, it is clear from the disclosure of Desormeaux that the tape is printed onto a user's skin surface by the printing device of Desormeaux" has been fully considered, in response

“Desormeaux ‘124 further discloses a method of printing on a surface (column 2, lines 66-67 and column 3, lines 1-8);

detecting the absolute position of a printing means housed within the handheld hybrid printing device in relation to the surface by detection of portions of the indicia pattern situated directly beneath the handheld hybrid printing device, and activating the printing means at designated locations on the surface as a function of the detected position on that surface, to thereby print the actual printing pattern on the surface (column 7, lines 4-23, where the device can contain an optical sensor which detects indicia on a surface and responds to this indicia as to what operation to perform).

Desormeaux ‘124 discloses all the subject matter as described above except printing, with a handheld hybrid printing device, an indicia pattern on the surface prior to printing an actual printing pattern on the surface with the handheld hybrid printing device;

However, Saund ‘266 teaches printing, with a handheld hybrid printing device, an indicia pattern on the surface prior to printing an actual printing pattern on the surface with the handheld hybrid printing device (140 in Fig. 1, and column 4, lines 8-31, where the making mechanism is capable of producing a representation (indicia) of the image on the surface).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made printing, with a handheld hybrid printing device, an indicia pattern on the surface prior to printing an actual printing pattern on the surface with the handheld hybrid printing device as taught by Saund ‘266 in the system of Desormeaux

‘124. With this the system will have a way to know the exact positioning on the paper of the image that is about to be printed.”

2. Objections to the drawings have been withdrawn.
3. Objections to the specification have been withdrawn.
4. Objections to the claims have been withdrawn.
5. Rejection under 35 U.S.C. 112, 2<sup>nd</sup> has been withdrawn.

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1, 3-11 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desormeaux (US 6,312,124) in view of Yamada (US 5,927,872).

(1) regarding claim 1:

Desormeaux ‘124 discloses a hybrid printing device for printing on a surface (Fig. 1 and Fig. 2 and column 7, lines 4-23, where in addition to a printing component the device can also contain an optical sensor), the device comprising:

a printing means adapted to print on the surface (column 2, lines 66-67 and column 3, lines 1-8); and

a sensing means adapted to sense the position of the printing device in relation to positioning indicia located on the surface wherein the printing means is further adapted to be responsive to the detected position of the device in relation to the detected position (column 7, lines 4-23, where the device can contain an optical sensor

which detects indicia on a surface and responds to this indicia as to what operation to perform).

Desormeaux '124 discloses all the subject matter as described above except wherein the hybrid printing device has a computer mouse form-factor.

However, Yamada '872 teaches wherein the hybrid printing device has a computer mouse form-factor (Fig. 2 and column 3, lines 45-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made wherein the hybrid printing device has a computer mouse form-factor as taught by Yamada '872 in the system of Desormeaux '124. A solution to the minimum size requirement of a conventional stand-alone printer and the limited types of print media that can be used to print an image is a hand-held printer that can be manually manipulated over a print medium (column 1, lines 44-48).

(2) regarding claim 3:

Desormeaux '124 further discloses wherein the device is connected to a printing control means by a wired, wireless, RF or Infra Red link (column 6, lines 18-23).

(3) regarding claim 4:

Desormeaux '124 further discloses wherein the positioning indicia encode data describing absolute or relative positions on the surface, said indicia being optically imaged by the sensing means and thus providing an output representing the absolute position of the printing means on the surface (column 7, lines 4-23, where the device can contain an optical sensor which detects indicia on a surface and where the indicia served as an optical pattern to generate a positional feedback signal).

(4) regarding claim 5:

Desormeaux '124 further discloses wherein the position of the printing means is used to control the operation of the printing means by switching the printing means on or off depending on whether the specific detected location on the surface is to be printing on (column 5, lines 57-67 and column 6 lines 1-7, where the controller coordinates the firing signals sent to the printhead to print the image according to the positional feedback signal).

(5) regarding claim 6:

Desormeaux '124 further discloses wherein the position of the sensing means, and hence the printing means, on the surface is determined by a combination of absolute position detection based on optical glyphs located on the surface (column 7, lines 18-23, where the device can contain an optical sensor which detects indicia on a surface and where the indicia served as an optical pattern to generate a positional feedback signal) and detection of movement of the sensing means relative to the surface (column 5, lines 57-67 and column 6 lines 1-7), thereby, so as long as at least one measurement of the absolute position is performed by the sensing means, the time-varying absolute position of the sensing means may be determined by reference to that absolute position and the movement of the sensing means relative to that absolute position (column 5, lines 57-67 and column 6 lines 1-7, where the controller coordinates the firing signals sent to the printhead to print the image according to the positional feedback signal).

(6) regarding claim 7:

Desormeaux '124 further discloses wherein the hybrid printing device is configured such that a sweeping action of the device over the surface will result in printing at designated locations on the surface (column 3, lines 15-18, where the hand-held printer is moved and it prints according to the specified marked locations).

(6) regarding claim 8:

Desormeaux '124 further discloses wherein an operation of the printing means is controlled by reference to data embedded in the indicia (column 6, lines 1-7).

(7) regarding claim 9:

Desormeaux '124 further discloses wherein movement of the printing means over the surface follows a regular, random or sequential scanning pattern with the printing means being activated depending on the detected location of the sensing means and hence the printing means (column 7, lines 4-23, where the device can contain an optical sensor which detects indicia on a surface and responds to this indicia as to what operation to perform).

(8) regarding claim 10:

Desormeaux '124 further discloses wherein the movement of the printing means is optimized depending on the print control data embedded in the indicia (column 7, lines 18-23, where the printing means respond to the information in the printed indicia).

(9) regarding claim 11:

Desormeaux '124 further discloses comprising printing control means, wherein the printing control means is a processor (column 6, lines 18-23, and 62 in Fig. 4).

(10) regarding claim 15:



Desormeaux '124 further discloses wherein the hybrid printing device is responsive to printing commands encoded on or into the surface whereby the hybrid device prints on the surface as it is passed over the surface in a manner which is controlled by the data contained in the area of the printing surface which is imaged by the device (column 7, lines 4-23, where the device can contain an optical sensor which detects indicia on a surface and responds to this indicia as to what operation to perform).

(11) regarding claim 16:

Desormeaux '124 further discloses wherein printing on the surface by the printing means is performed based in part on print information provided within the indicia (column 6, lines 1-7, where the print information is obtained with a combination of information in the controller and indicia positioning).

(12) regarding claim 17:

Desormeaux '124 further discloses wherein the print information includes information as to which colors (column 5, lines 8-13, where it shows that the information can contain colors) to print at a region corresponding to each respective indicia (column 6, lines 1-7, where the print information is obtained with a combination of information in the controller and indicia positioning).

8. Claims 12-13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desormeaux (US 6,312,124) in view of Saund (6,517,266).

(1) regarding claim 12:

Desormeaux '124 further discloses a method of printing on a surface (column 2, lines 66-67 and column 3, lines 1-8);

detecting the absolute position of a printing means housed within the handheld hybrid printing device in relation to the surface by detection of portions of the indicia pattern situated directly beneath the handheld hybrid printing device, and activating the printing means at designated locations on the surface as a function of the detected position on that surface, to thereby print the actual printing pattern on the surface (column 7, lines 4-23, where the device can contain an optical sensor which detects indicia on a surface and responds to this indicia as to what operation to perform).

Desormeaux '124 discloses all the subject matter as described above except printing, with a handheld hybrid printing device, an indicia pattern on the surface prior to printing an actual printing pattern on the surface with the handheld hybrid printing device;

However, Saund '266 teaches printing, with a handheld hybrid printing device, an indicia pattern on the surface prior to printing an actual printing pattern on the surface with the handheld hybrid printing device (140 in Fig. 1, and column 4, lines 8-31, where the making mechanism is capable of producing a representation (indicia) of the image on the surface).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made printing, with a handheld hybrid printing device, an indicia pattern on the surface prior to printing an actual printing pattern on the surface with the handheld hybrid printing device as taught by Saund '266 in the system of Desormeaux

'124. With this the system will have a way to know the exact positioning on the paper of the image that is about to be printed.

(2) regarding claim 14:

Desormeaux '124 further discloses an indicia pattern is printed on the surface prior to printing a particular printing pattern, created by way of a user utilizing a print application program on a computer communicatively connected to the hybrid printing device, with the handheld hybrid printing device (column 7, lines 18-23, where the indicia placed on a print surface (emphasis in the past tense of place) is a clear indication that the indicia was previously placed in the surface).

(3) regarding claim 18:

Desormeaux '124 further discloses detecting print information provided within the indicia pattern (column 6, lines 1-7, where the print information is obtained with a combination of information in the controller and indicia positioning),

wherein the print information includes information as to which colors (column 5, lines 8-13, where it shows that the information can contain colors) to print at a region corresponding to each respective indicia (column 6, lines 1-7, where the print information is obtained with a combination of information in the controller and indicia positioning).

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desormeaux (US 6,312,124) and Saund (6,517,266) as applied to claims above, and further in view of Ichimura (US 5,878,200).

Desormeaux '124 and Saund '266 disclose all the subject matter as described above except wherein a printing control means remembers at which locations on the surface have already been printed on, thereby allowing the movement of the hybrid device over the surface to be interrupted.

However, Ichimura '200 teaches wherein a printing control means remembers at which locations on the surface have already been printed on, thereby allowing the movement of the hybrid device over the surface to be interrupted (column 5, lines 18-31, where the print control code makes sure the printed portion is skip from further printing thereon).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a printing control means remembers at which locations on the surface have already been printed on, thereby allowing the movement of the hybrid device over the surface to be interrupted as taught by Ichimura '200, in the system of Desormeaux '124 and Saund '266. With this the system makes sure that the printing device does not re-print or print something over a surface that has been printed thereon before.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LENNIN R. RODRIGUEZ whose telephone number is (571)270-1678. The examiner can normally be reached on Monday - Thursday 7:30am - 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/  
Supervisory Patent Examiner, Art Unit 2625

Lennin Rodriguez  
3/14/08